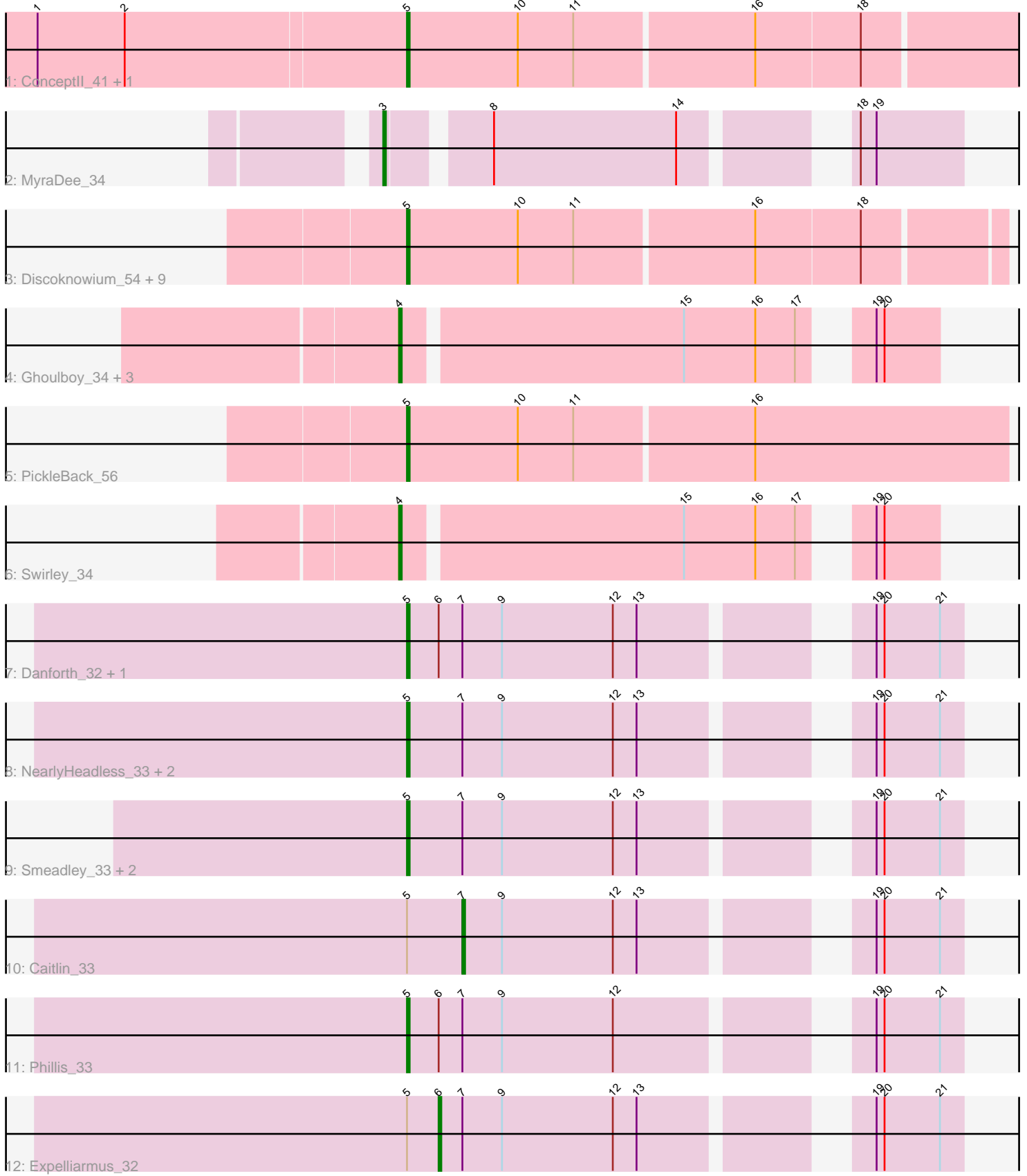


Pham 311875



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 311875 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311875 has 30 members, 1 are drafts.

Phages represented in each track:

- Track 1 : ConceptII\_41, Teodoridan\_37
- Track 2 : MyraDee\_34
- Track 3 : Discoknowium\_54, Jovo\_56, Lev2\_56, Conspiracy\_56, Archetta\_55, ForGetIt\_56, Tiger\_55, AgentM\_55, Aragog\_55, Phlorence\_54
- Track 4 : Ghoulboy\_34, SydNat\_34, Zolita\_33, Micasa\_34
- Track 5 : PickleBack\_56
- Track 6 : Swirley\_34
- Track 7 : Danforth\_32, Roary\_33
- Track 8 : NearlyHeadless\_33, Stephig9\_33, Dixon\_33
- Track 9 : Smeadley\_33, Groundhog\_32, Astro\_33
- Track 10 : Caitlin\_33
- Track 11 : Phillis\_33
- Track 12 : Expelliarmus\_32

### ***Summary of Final Annotations (See graph section above for start numbers):***

The start number called the most often in the published annotations is 5, it was called in 21 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AgentM\_55, Aragog\_55, Archetta\_55, Astro\_33, ConceptII\_41, Conspiracy\_56, Danforth\_32, Discoknowium\_54, Dixon\_33, ForGetIt\_56, Groundhog\_32, Jovo\_56, Lev2\_56, NearlyHeadless\_33, Phillis\_33, Phlorence\_54, PickleBack\_56, Roary\_33, Smeadley\_33, Stephig9\_33, Teodoridan\_37, Tiger\_55,

Genes that have the "Most Annotated" start but do not call it:

- Caitlin\_33, Expelliarmus\_32,

Genes that do not have the "Most Annotated" start:

- Ghoulboy\_34, Micasa\_34, MyraDee\_34, Swirley\_34, SydNat\_34, Zolita\_33,

### **Summary by start number:**

Start 3:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MyraDee\_34 (A18),

Start 4:

- Found in 5 of 30 ( 16.7% ) of genes in pham
- Manual Annotations of this start: 5 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ghoulboy\_34 (A5), Micasa\_34 (A5), Swirley\_34 (A5), SydNat\_34 (A5), Zolita\_33 (A5),

Start 5:

- Found in 24 of 30 ( 80.0% ) of genes in pham
- Manual Annotations of this start: 21 of 29
- Called 91.7% of time when present
- Phage (with cluster) where this start called: AgentM\_55 (A5), Aragog\_55 (A5), Archetta\_55 (A5), Astro\_33 (A8), Conceptll\_41 (A1), Conspiracy\_56 (A5), Danforth\_32 (A8), Discoknowium\_54 (A5), Dixon\_33 (A8), ForGetIt\_56 (A5), Groundhog\_32 (A8), Jovo\_56 (A5), Lev2\_56 (A5), NearlyHeadless\_33 (A8), Phillis\_33 (A8), Phlorence\_54 (A5), PickleBack\_56 (A5), Roary\_33 (A8), Smeadley\_33 (A8), StepHig9\_33 (A8), Teodoridan\_37 (A1), Tiger\_55 (A5),

Start 6:

- Found in 4 of 30 ( 13.3% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Expelliarmus\_32 (A8),

Start 7:

- Found in 11 of 30 ( 36.7% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Caitlin\_33 (A8),

### **Summary by clusters:**

There are 4 clusters represented in this pham: A1, A8, A5, A18,

Info for manual annotations of cluster A1:

- Start number 5 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A18:

- Start number 3 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A5:

- Start number 4 was manually annotated 5 times for cluster A5.
- Start number 5 was manually annotated 11 times for cluster A5.

Info for manual annotations of cluster A8:

- Start number 5 was manually annotated 9 times for cluster A8.
- Start number 6 was manually annotated 1 time for cluster A8.
- Start number 7 was manually annotated 1 time for cluster A8.

**Gene Information:**

Gene: AgentM\_55 Start: 38824, Stop: 38606, Start Num: 5

Candidate Starts for AgentM\_55:

(Start: 5 @38824 has 21 MA's), (10, 38782), (11, 38761), (16, 38695), (18, 38656),

Gene: Aragog\_55 Start: 38844, Stop: 38626, Start Num: 5

Candidate Starts for Aragog\_55:

(Start: 5 @38844 has 21 MA's), (10, 38802), (11, 38781), (16, 38715), (18, 38676),

Gene: Archetta\_55 Start: 39254, Stop: 39036, Start Num: 5

Candidate Starts for Archetta\_55:

(Start: 5 @39254 has 21 MA's), (10, 39212), (11, 39191), (16, 39125), (18, 39086),

Gene: Astro\_33 Start: 26479, Stop: 26291, Start Num: 5

Candidate Starts for Astro\_33:

(Start: 5 @26479 has 21 MA's), (Start: 7 @26458 has 1 MA's), (9, 26443), (12, 26401), (13, 26392), (19, 26323), (20, 26320), (21, 26299),

Gene: Caitlin\_33 Start: 26451, Stop: 26284, Start Num: 7

Candidate Starts for Caitlin\_33:

(Start: 5 @26472 has 21 MA's), (Start: 7 @26451 has 1 MA's), (9, 26436), (12, 26394), (13, 26385), (19, 26316), (20, 26313), (21, 26292),

Gene: ConceptII\_41 Start: 32595, Stop: 32362, Start Num: 5

Candidate Starts for ConceptII\_41:

(1, 32733), (2, 32700), (Start: 5 @32595 has 21 MA's), (10, 32553), (11, 32532), (16, 32466), (18, 32427),

Gene: Conspiracy\_56 Start: 39066, Stop: 38848, Start Num: 5

Candidate Starts for Conspiracy\_56:

(Start: 5 @39066 has 21 MA's), (10, 39024), (11, 39003), (16, 38937), (18, 38898),

Gene: Danforth\_32 Start: 26364, Stop: 26176, Start Num: 5

Candidate Starts for Danforth\_32:

(Start: 5 @26364 has 21 MA's), (Start: 6 @26352 has 1 MA's), (Start: 7 @26343 has 1 MA's), (9, 26328), (12, 26286), (13, 26277), (19, 26208), (20, 26205), (21, 26184),

Gene: Discoknowium\_54 Start: 38733, Stop: 38515, Start Num: 5

Candidate Starts for Discoknowium\_54:

(Start: 5 @38733 has 21 MA's), (10, 38691), (11, 38670), (16, 38604), (18, 38565),

Gene: Dixon\_33 Start: 26473, Stop: 26285, Start Num: 5

Candidate Starts for Dixon\_33:

(Start: 5 @26473 has 21 MA's), (Start: 7 @26452 has 1 MA's), (9, 26437), (12, 26395), (13, 26386), (19, 26317), (20, 26314), (21, 26293),

Gene: Expelliarmus\_32 Start: 26338, Stop: 26162, Start Num: 6

Candidate Starts for Expelliarmus\_32:

(Start: 5 @26350 has 21 MA's), (Start: 6 @26338 has 1 MA's), (Start: 7 @26329 has 1 MA's), (9, 26314), (12, 26272), (13, 26263), (19, 26194), (20, 26191), (21, 26170),

Gene: ForGetIt\_56 Start: 39091, Stop: 38873, Start Num: 5

Candidate Starts for ForGetIt\_56:

(Start: 5 @39091 has 21 MA's), (10, 39049), (11, 39028), (16, 38962), (18, 38923),

Gene: Ghoulboy\_34 Start: 27580, Stop: 27398, Start Num: 4

Candidate Starts for Ghoulboy\_34:

(Start: 4 @27580 has 5 MA's), (15, 27478), (16, 27451), (17, 27436), (19, 27421), (20, 27418),

Gene: Groundhog\_32 Start: 26444, Stop: 26256, Start Num: 5

Candidate Starts for Groundhog\_32:

(Start: 5 @26444 has 21 MA's), (Start: 7 @26423 has 1 MA's), (9, 26408), (12, 26366), (13, 26357), (19, 26288), (20, 26285), (21, 26264),

Gene: Jovo\_56 Start: 39347, Stop: 39129, Start Num: 5

Candidate Starts for Jovo\_56:

(Start: 5 @39347 has 21 MA's), (10, 39305), (11, 39284), (16, 39218), (18, 39179),

Gene: Lev2\_56 Start: 38979, Stop: 38761, Start Num: 5

Candidate Starts for Lev2\_56:

(Start: 5 @38979 has 21 MA's), (10, 38937), (11, 38916), (16, 38850), (18, 38811),

Gene: Micasa\_34 Start: 27303, Stop: 27121, Start Num: 4

Candidate Starts for Micasa\_34:

(Start: 4 @27303 has 5 MA's), (15, 27201), (16, 27174), (17, 27159), (19, 27144), (20, 27141),

Gene: MyraDee\_34 Start: 25891, Stop: 25703, Start Num: 3

Candidate Starts for MyraDee\_34:

(Start: 3 @25891 has 1 MA's), (8, 25858), (14, 25789), (18, 25741), (19, 25735),

Gene: NearlyHeadless\_33 Start: 26403, Stop: 26215, Start Num: 5

Candidate Starts for NearlyHeadless\_33:

(Start: 5 @26403 has 21 MA's), (Start: 7 @26382 has 1 MA's), (9, 26367), (12, 26325), (13, 26316), (19, 26247), (20, 26244), (21, 26223),

Gene: Phillis\_33 Start: 26429, Stop: 26241, Start Num: 5

Candidate Starts for Phillis\_33:

(Start: 5 @26429 has 21 MA's), (Start: 6 @26417 has 1 MA's), (Start: 7 @26408 has 1 MA's), (9, 26393), (12, 26351), (19, 26273), (20, 26270), (21, 26249),

Gene: Phlorence\_54 Start: 38724, Stop: 38506, Start Num: 5

Candidate Starts for Phlorence\_54:

(Start: 5 @38724 has 21 MA's), (10, 38682), (11, 38661), (16, 38595), (18, 38556),

Gene: PickleBack\_56 Start: 38901, Stop: 38677, Start Num: 5

Candidate Starts for PickleBack\_56:

(Start: 5 @38901 has 21 MA's), (10, 38859), (11, 38838), (16, 38772),

Gene: Roary\_33 Start: 26349, Stop: 26161, Start Num: 5

Candidate Starts for Roary\_33:

(Start: 5 @26349 has 21 MA's), (Start: 6 @26337 has 1 MA's), (Start: 7 @26328 has 1 MA's), (9, 26313), (12, 26271), (13, 26262), (19, 26193), (20, 26190), (21, 26169),

Gene: Smeadley\_33 Start: 26472, Stop: 26284, Start Num: 5

Candidate Starts for Smeadley\_33:

(Start: 5 @26472 has 21 MA's), (Start: 7 @26451 has 1 MA's), (9, 26436), (12, 26394), (13, 26385), (19, 26316), (20, 26313), (21, 26292),

Gene: Stephig9\_33 Start: 26377, Stop: 26189, Start Num: 5

Candidate Starts for Stephig9\_33:

(Start: 5 @26377 has 21 MA's), (Start: 7 @26356 has 1 MA's), (9, 26341), (12, 26299), (13, 26290), (19, 26221), (20, 26218), (21, 26197),

Gene: Swirley\_34 Start: 27310, Stop: 27128, Start Num: 4

Candidate Starts for Swirley\_34:

(Start: 4 @27310 has 5 MA's), (15, 27208), (16, 27181), (17, 27166), (19, 27151), (20, 27148),

Gene: SydNat\_34 Start: 27589, Stop: 27407, Start Num: 4

Candidate Starts for SydNat\_34:

(Start: 4 @27589 has 5 MA's), (15, 27487), (16, 27460), (17, 27445), (19, 27430), (20, 27427),

Gene: Teodoridan\_37 Start: 31023, Stop: 30790, Start Num: 5

Candidate Starts for Teodoridan\_37:

(1, 31161), (2, 31128), (Start: 5 @31023 has 21 MA's), (10, 30981), (11, 30960), (16, 30894), (18, 30855),

Gene: Tiger\_55 Start: 38645, Stop: 38427, Start Num: 5

Candidate Starts for Tiger\_55:

(Start: 5 @38645 has 21 MA's), (10, 38603), (11, 38582), (16, 38516), (18, 38477),

Gene: Zolita\_33 Start: 27593, Stop: 27411, Start Num: 4

Candidate Starts for Zolita\_33:

(Start: 4 @27593 has 5 MA's), (15, 27491), (16, 27464), (17, 27449), (19, 27434), (20, 27431),